



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,300	02/21/2002	Holger Warth	Mo6879/LeA 33,977	8773

157 7590 07/09/2003

BAYER POLYMERS LLC
100 BAYER ROAD
PITTSBURGH, PA 15205

EXAMINER

CHANG, VICTOR S

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 07/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/080,300	Applicant(s) WARTH ET AL.	
	Examiner Victor S Chang	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>116, 221</u> . | 6) <input type="checkbox"/> Other: . |

DETAILED ACTION

1. PTO-1449 filed 1/16/2003 and 2/21/2002 are labeled as Paper No. 116 and 221, respectively.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5, 14, 22 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 5 and 14, line 1 of each claim, the Examiner suggests to change "contains" and "containing" to --comprises-- and --comprising--, respectively.

In claim 22, line 2, the term "solid" is vague and indefinite, i.e., it is unclear as to the scope of "solid".

In claim 23, the structural relations among the layers are vague and indefinite, the Examiner suggests to incorporate claim 25 into claim 23.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 1771

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Padwa et al. (US 5910538).

Padwa's invention is directed to a thermoplastic molding composition comprising A) an aromatic polycarbonate resin, B) a vinyl copolymer, and C) a graft polymer (column 1 lines 31-36). The Examiner notes that Padwa's components B and C read on the components C and B of the instantly claimed invention, respectively.

For claims 1 and 6, Padwa teaches that the weight average molecular weight of the copolymer of Component B is in the range of 15,000 to 200,000 (column 4, lines 52-54).

For claims 2-5, Padawa teaches that component B comprises 4.5 to 70 pbw of a vinyl copolymer containing 50 to 99 wt% of the copolymer of at least one member selected from the group consisting of styrene, alpha-methyl styrene, etc. and 1 to 50 wt% of the copolymer of at least one member selected from the group consisting of acrylonitrile, maleic anhydride, etc. (column 1, lines 49-56).

For claims 7 and 8, Padwa teaches that component A comprises 20 to 90 pbw of an aromatic polycarbonate (homopolycarbonates and copolycarbonates and mixtures thereof) (column 1, lines 47-48, and column 2, lines 29-31).

For claims 9-11, Padwa teaches that component C comprises 5 to 70 parts by weight (pbw) of a graft polymer containing 5 to 95 wt% of the graft polymer of a grafted phase, and 5 to 95 wt% of the graft polymer of a graft base, wherein the grafted phase contains a polymerized mixture of 50 to 99 wt% of said mixture, of at least one member

Art Unit: 1771

selected from the group consisting of styrene, alpha-methyl styrene, etc. and 1 to 50 wt% of said mixture, of at least one polar monomer selected from the group consisting of acrylonitrile, maleic anhydride, etc., and wherein the graft base includes a crosslinked elastomer having a glass transition temperature lower than 10°C (column 1, line 63 to column 2, line 31). Further, it is believed that styrene is inherently a vinyl monomer.

For claims 12 and 13, Padwa teaches that component D comprises 0.5 to 5 pbw per one hundred parts of the total A, B and C of a compatibilizing agent which is a styrene-acrylonitrile-maleic anhydride terpolymer (column 7, lines 28-29).

For claims 14-15, Padaw teaches that the composition may advantageously contain conventional additives such as plasticizers, flame-retardants, mineral fillers, pigments, etc. (column 7, lines 46-50), and it is believed that the mineral fillers inherently encompass inorganic particles such as talc and titanium dioxide, etc.

For claim 16, Padwa teaches that the components are blended in a high intensity blender such as a Banbury Mixer or twin-screw extruder (column 7, lines 54-58), and at 260°C (column 8, line 62).

For claims 17 and 18, Padwa teaches that the palletized blended material (i.e., composition) is injection molded into specimens.

Claims lack novelty.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1771

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 19-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reihs et al. (US 6296908) in view of Padwa et al. (US 5910538).

The teachings of Padwa are again relied upon as set forth above.

For claims 19-22, Padwa lacks an express teaching of a multilayered composite of a layer of polycarbonate containing composition and a layer of polyurethane or polyurethane foam. However, it is noted that Reihs' invention is directed to composite materials made of at least one composite layer of a polyurethane and of a second composite layer which is directly bonded to the first layer and which consists of a thermoplastic material (Abstract). The polyurethane layer may be foamed or in solid form (column 4, lines 47-48). Reihs also expressly teaches that all the known thermoplastics, including polycarbonate, etc., are suitable for use as thermoplastic plastic materials for layer B (column 7, lines 6-14). As such, it would have been obvious to one skilled in the art to modify the composites of Reihs with Padwa's polycarbonate containing composition, motivated by the desire to obtain improved mechanical properties of the composite for applications such as automotive construction.

For claims 23-25, it is believed that an automotive interior laminate of polyvinyl chloride and polyurethane layers is old and well known, as evidenced by JP 07-268207 (English Abstract), which teaches that the aforementioned laminate provides excellent heat and light resistances. As such, it would have been obvious to one of ordinary skill

Art Unit: 1771

in the art automotive laminate to incorporate a polyvinyl chloride layer, motivated by the desire to obtain a light resistant outer layer.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S Chang whose telephone number is 703-605-4296. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

VSC
July 8, 2003

DANIEL ZIRKER
PRIMARY EXAMINER
GROUP 1300
1700

Daniel Zinker